

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1–14 (Canceled)

Claim 15 (Currently amended). A data switch for passing packets as sets of one or more packet flows between a plurality of ports, the data switch comprising:

a flow detection device configured to detect a set of one or more packet flows to which each packet belongs; and

a bandwidth monitoring device having a RAM memory with a section corresponding to each set of one or more packet flows, the memory sections each containing a bandwidth counter for the corresponding set of one or more packet flows, the bandwidth monitoring device being configured to:

subtract the size of the packet from a value of the bandwidth counter corresponding to the detected set of one more packet flows to obtain an adjusted value and to issue a policing instruction according to the relationship of the adjusted value with one or more predetermined levels;

replace the value of the bandwidth counter corresponding to the detected set of one more packet flows by the adjusted value in the event that the packet is transmitted by the switch; and

replenish the value stored in each bandwidth counter at intervals;

wherein the one or more predetermined levels include a first predetermined level corresponding to a first set of one or more flows and a second predetermined level,

different from the first predetermined level, corresponding to a second set of one or more flows; and

wherein the RAM memory includes control parameter indication portions for each of the sets of one or more flows, the control parameter indication portions indicating respective registers for storing the data representative of the one or more predetermined levels.

Claims 16-19 (Canceled).

Claim 20 (previously presented). The data switch according to claim 15 wherein the plurality of sets of one or more flows are grouped into ranges, and wherein the policing instructions in respect of a particular set of one or more flows depends upon the range in which the set of one or more flows lies.

Claim 21 (previously presented). The data switch according to claim 15, wherein each set of one or more flows is associated with one of a plurality of policing instructions, said plurality of policing instructions including dropping a packet and reducing a priority packet.

Claim 22 (Currently amended). A method of policing flows of packets within a data switch for passing packets between a plurality of ports, the method including:

storing a bandwidth counter for each of a plurality of sets of one or more flows in a RAM memory, the RAM memory having a corresponding section for each of the sets of one or more flows;

detecting the set of one or more flows to which a packet belongs;

subtracting the size of the packet from ~~the~~ a value stored in the bandwidth counter corresponding to the set of one or more flows to obtain an adjusted value;

issuing a policing instruction based on the adjusted value according to the position of the adjusted value with respect to predetermined levels;

if, despite any such policing instruction, the packet is transmitted, adjusting the value stored the bandwidth counter corresponding to the set of one or more flows by the size of the packet; and

replenishing the value stored in each bandwidth counter at intervals;

wherein the predetermined levels include a first predetermined level corresponding to a first set of one or more flows and a second predetermined level, different from the first predetermined level, corresponding to a second set of one or more flows; and

wherein the RAM memory includes control parameter indication portions for each set of one or more flows, the control parameter indication portions indicating respective registers for storing the data representative of the predetermined levels.

Claims 23-25 (Canceled).

Claim 26 (previously presented). The method according to claim 22 wherein the sets of one or more flows are grouped into ranges, and wherein the policing instructions in respect of a particular set of one or more flows depends upon the range in which the set of one or more flows lies.

Claim 27 (previously presented). The data switch according to claim 22, wherein each set of one or more flows is associated with one of a plurality of policing instructions, said

plurality of policing instructions including dropping a packet and reducing a priority packet.

Claim 28 (previously presented). The method according to claim 27 wherein the predetermined levels include a first predetermined level corresponding to a first set of one or more flows and a second predetermined level, different from the first predetermined level, corresponding to a second set of one or more flows.

Claim 29 (Canceled).